

PEDIATRICS

Elective Clerkships

Department website: <http://depts.washington.edu/peds/students/>

PEDS 611 P- Country Doctor FreeTeen Clinic (*, max 24)

Offered:	AWSpS; 1 night per week for 6/12 weeks.
Prerequisite:	Third- and fourth-year medical students who have completed a clerkship in Medicine or Pediatrics. Please do not sign up for more than two 6-week slots. Preference to those who have completed the Winter Quarter seminar by M Bonnar, et al (PEDS 530).
Total Enrollment:	2 students per rotation.
Location:	Seattle, WA
Facility:	Country Doctor Community Clinic
Faculty Contact:	Dr. Ann Giesel, Ms. Mavis Bonnar
Administrative Contact:	Sara Griffin, 206-987-2008, sara.griffin@seattlechildrens.org

Students attend one night per week at a free clinic for adolescents and young adults at the Country Doctor Community Clinic site. The patients seen generally have histories of inadequate health care; many are homeless or street involved. A variety of interesting medical problems are seen.

Goals:

- Learn about health concerns of homeless youth
- Learn about the impact of a homeless lifestyle on general health

Objectives:

After completion of this elective the student will be able to:

- Identify barriers to care for adolescent patients,
- Perform general physical examinations on homeless youths,
- Provide problem-focused care for homeless youths,
- Demonstrate clinical case presentation skills appropriate for this population.

Schedule: Monday or Tuesday evenings 6pm-10pm

Conferences: informal, during clinic hours, if time permits

Presentations: informal, during clinic hours, if time permits

PEDS 625 – Pediatric Emergency Medicine (8)

Offered:	AWSpS; 4 weeks
Prerequisite:	Pediatric core clerkship. Fourth-year medical students.
Total Enrollment:	1 student per rotation.
Location:	Seattle, WA
Facility:	Seattle Children's Hospital
Faculty Contact :	Eileen Klein, MD, MPH
Administrative Contact :	Sara Griffin, 206-987-2008, sara.griffin@seattlechildrens.org

Goals:

- Gain a better understanding of the types of problems seen in a Pediatric Emergency Department and of the increased complexity when dealing with family units (parents in decision making role for their children) rather than just individual patients.
- Learn how to work as part of a team in the care of ill patients and to provide efficient and excellent care to children in the busy ED setting.

Objectives:**After completion of this elective the student will be able to:**

- Perform a number of procedures that may include: laceration repair, I and D, splinting and reduction of nursemaids elbow (opportunities to do such procedures depend on what patients come into the ED while they are working)
- Demonstrate basic assessment skills used to determine the severity and nature of illnesses or injuries in children who are seen in an emergency setting.
- Be able to communicate effectively with families, patients and staff in the care of patients in the emergency setting.

Schedule:

15 to 18 8-hour ED shifts

Presentations:

One morning presentation on an assigned emergency topic

Readings/texts:

Reading will be case based.

Suggested texts:

Pediatric Emergency Medicine: A comprehensive study guide by Strange, Ahrens, Lelyveld, Schafermeyer

Pediatric Emergency Medicine by Fleisher, Ludwig

Evaluation:

By faculty, on clinical performance using standard UWSOM evaluation form. Feedback will also be given at the end of each shift.

PEDS 669 P- Neonatal Pediatric Clerkship (*, max 24)

Offered:	AWSpS; full-time; UWMC, 2 weeks (for students desiring further neonatal intensive care exposure) or 4 weeks (recommended for students interested in Pediatrics as a career). This course is an elective, not a sub-internship.
Prerequisite:	PEDS, MED & OB GYN required clerkships. Open to fourth-year medical students.
Enrollment:	2 students per rotation.
Location:	Seattle, WA
Facility:	UWMC NICU
Faculty:	Drs. Batra, Chabra, Gleason, Hodson, Jackson, Juul, Knox, Loren, Mayock, Neufeld, Strandjord, Woodrum
Administrative Contacts:	Isabella Knox, MD; Mildred Hill, Neonatology Admin Coord
	On 1 st day of rotation: 6N NICU: see April Millar, R.N. 598-4606

Goals:

- To obtain a broad understanding of medical problems experienced by infants during the first month of life,
- Acquire an understanding of, and appreciation for, prenatal care of high-risk patients,
- Learn generally applicable principles in the NICU setting:
 - Physiology

- Ethics
- Reading, critiquing, and applying the medical literature

Objectives:

After completion of this elective the student will be able to:

- Demonstrate the knowledge and skills necessary for neonatal resuscitation including transitional physiology;
- Obtain an accurate history of pregnancy and perinatal events relevant to the newborn;
- Articulate the unique aspects of the physical examination of the premature and newly born full term infant;
- Perform a gestational age determination and complete physical examination on term and preterm infants;
- Outline the assessment and management of LGA and SGA infants;
- Describe the broad medical, social, and economic consequences of prematurity, including factors related to, or influencing, its incidence and the incidence of disorders unique to premature infants;
- Describe the pathophysiology, diagnostic approach, and management principles for common diseases that occur during the neonatal period such as respiratory distress, sepsis, apnea, infections, metabolic derangements, and jaundice;
- Explain the effects of birth weight and gestational age on infant morbidity and mortality;
- Recognize the clinical presentation of emergencies occurring in the newborn period and gain exposure to the skills necessary to provide appropriate management of these emergencies including respiratory distress with/without cyanosis, shock, hemorrhage, and seizures;
- Recognize frequent birth defects and outline their clinical management.

Schedule:

Inpatient Rounds: Daily starting at 8 AM in the NICU. During rounds, students will present their assigned patients including management plans.

Call: Students have the option to take night call every fourth night paired with an Intern/Resident.

Patient Care: Students will assess their patients, prepare management plans, and write orders in conjunction with a Pediatric Resident. Students attend high-risk deliveries in conjunction with a Pediatric Resident, Neonatal Fellow or Neonatal Attending. A student under the direct supervision of a Pediatric Resident can perform procedures necessary for patient care. Students can participate in Prenatal/Antenatal consultations with an Attending Neonatologist.

Conferences:

Prenatal Genetics Conferences on Fridays at 11 AM (room TBA); Perinatal Pathology Conference once monthly at noon (room TBA); Ob/Peds Case Discussions on Thursdays at noon; NICU Ethics Discussion on the 4th Wednesday at noon.

Presentations:

Presentations: Students are expected to present a 20-30-minute discussion of a clinical issue of their choice relating to a current case on the service. The discussion should include information derived from relevant current medical literature.

Reading:

Multiple texts and teaching files are available for use in the Resident room in the NICU.

Suggested readings:

Neonatal Resuscitation:

Neonatal Resuscitation Program (AAP/AHA) 4th Edition

General Neonatal Texts:

Avery, Fletcher and MacDonald – Neonatology, recent edition

Fanaroff and Martin – Neonatal Perinatal Medicine, recent edition

Tausch, Ballard and Gleason – Avery's Diseases of the Newborn, recent edition

Evaluation: By Faculty: The majority of the evaluation will be on clinical performance with feedback elicited from Neonatal attending with input from the Fellows and Pediatric Residents on-service in the NICU who are familiar with the student.

PEDS 670 P- Pediatric Infectious Disease Elective (*, max 24)

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	PEDS, MED & OB GYN required clerkships. Third- & fourth-year medical students.
Enrollment:	1 student per rotation.
Location:	Seattle, WA
Facility:	Seattle Children's Hospital
Faculty:	Drs. Rubens, Burns, Campbell, Cassis-Ghavami, Englund, Frenkel, Melvin, Pozos, Smith, Tamura, Weissman, Urdahl, Zerr
Administrative Contacts:	Sherilyn Smith, M.D., ssmit1@u.washington.edu Sara Griffin, 206-987-2008, sara.griffin@seattlechildrens.org

Goals:

- To understand the diagnostic work up and treatment of infectious disease syndromes in children,
- To understand the rationale for antibiotic choice in treatment of pediatric infectious diseases,
- To apply concepts of microbiology and virology to clinical problems,
- To become familiar with the available reference sources pertinent to infectious disease problems,
- To understand the role of a consultant in the management of pediatric patients.

Objectives:

After completion of this elective the student will be able to:

- Demonstrate a working knowledge of antimicrobial pharmacology and mechanisms of antimicrobial resistance,
- Gather information and conduct a patient interview in a manner appropriate to generate a consultation,
- Interpret the results of microbial cultures (both viral and bacterial) and antimicrobial susceptibilities,
- Outline the pathogenesis, diagnosis and treatment of all patients seen in consultation during the rotation.

Schedule:

Consultations: Students should perform at least 2-3 new consults each week. A complete work up should include a full history and physical exam, review of pertinent x-rays and lab data, formulation of a differential diagnosis and recommendations as to further workup and treatment. Directed reading of pertinent literature should be done prior to attending rounds if time permits. The student should see the patient she/he follows daily and write follow-up notes when further input from the service is appropriate.

Inpatient Rounds: Monday through Friday. Meet at the 8th floor fellows' office at 8:30 am unless otherwise arranged. Attending rounds occur daily at 11:00 am unless otherwise arranged. During attending rounds, fellows, residents and students present new consults and review the management of patients on the service.

ID clinic: Fridays 7:45 am-12:00 pm; 6H clinic with Drs. Burns, Smith, Cassis-Ghavami, Urdahl, Lingappa and Kathey Mohan, ARNP. The usual number of patients scheduled is between 6 and 14 with the expectation that no more than 5 new patients will be seen in a morning. Students should see new patients with a wide variety of problems and provide continuity of care for those patients they cared for on the inpatient consultation service. The student will initially see the patients then discuss the patient case with the clinic attending. A treatment plan will then be devised and discussed with the patient after the

attending has interviewed and examined the patient. All patients are to have a clinic note written. Each student typically sees two patients/clinic.

Virology Rounds: Tuesdays at 11:00 am, 8th floor virology lab; the student will be introduced to common tests performed in the clinical virology lab.

Microbiology Rounds: Thursdays at 11:00 am, 6th floor microbiology lab; the student will review interesting cases and common techniques used in the clinical microbiology lab.

Infection Control Rounds: 1st Thursday of each month, 8th floor Fellows' office. The ID team reviews current hospital epidemiology, infection control policies and outbreak investigations.

Conferences:

ID Clinical Conference: 2nd and 4th Wednesdays at SEATTLE CHILDREN'S HOSPITAL on selected pertinent cases from the inpatient service. Students will be expected to present a case with discussion at one of these conferences (see below).

ID Research Conference: 1st and 3rd Wednesday at SEATTLE CHILDREN'S HOSPITAL (optional)
Harborview ID conference: Wednesdays at 4:30-5:30 pm at Harborview Hall.

Reading:

Evidence based decision-making is strongly encouraged during the rotation. In depth review of primary studies of clinical problems is encouraged. Multiple textbooks are available for use in the ID fellows' office as are teaching files. At a minimum, the student should be familiar with:

1. Feigin and Cherry, *Pediatric Infectious Diseases*, Saunders, latest edition.
2. AAP Redbook (latest edition).
3. Remington and Klein, *Infectious Diseases of the Fetus & Newborn Infant*, Saunders, latest edition.

There is also a medical student-reading list with review articles/presentations of common pediatric ID problems.

Recommended Text: A Clinical Guide to Pediatric Infectious Disease by D. Janner. (There is a copy available for students to borrow while on rotation)

Presentations:

During the rotation, each student will give a short clinical presentation as outlined below. The talk will be during the final clinical conference of the student's rotation. The Pediatric ID fellows and faculty attend this conference. A list of possible topics is available in the ID office. The talk should be 10-15 minutes and include a current review of the literature. Optimal topics would be related to a current case on the service. Handouts summarizing the topic are expected but overheads are optional. The student should decide on a topic for the conference by mid-rotation and request appropriate faculty or fellow input. Faculty guidance can be from the on-service attending or from a list of attendings with special interest in the topic. The on-service ID attending will give oral feedback to the student following the presentation about content and presentation.

Evaluation:

1. By student. The Student will receive a packet with evaluation forms for the clerkship, faculty and fellow teaching. This is to be turned in using the sealed envelope at the end of the rotation. The faculty coordinator will review the contents once the student's final grade is submitted.
2. By Faculty, the majority of the evaluation will be from clinical performance and elicited from attending physicians and fellows. Approximately 10% of the final grade for the elective will be derived from the clinical conference talk.

PEDS 671 P- PEDIATRIC ENDOCRINOLOGY (*, max 24)

Offered:	AWSpS; full-time; 2 and 4 week rotations available.
Prerequisite:	PEDS required clerkship, third- and fourth-year medical students
Total Enrollment:	2 students per rotation.
Location:	Seattle, WA
Facility:	Seattle Children's Hospital
Faculty Contact:	Patricia Fechner, MD; Cate Pihoker, MD
Administrative Contact:	Catlyn Bauman, 206-987-5037

Goals:

- To understand the normal progression of hormone mediated processes in children, in relationship to the health management of patients in a pediatrician's practice.
- To recognize abnormalities in these processes, which would warrant a referral to an endocrinologist, and to understand basic management of these disorders. Specifically, these processes include:
 - Pituitary, adrenal, thyroid, and gonadal function
 - Growth
 - Sexual differentiation
 - Puberty
 - Diabetes mellitus – type I and type II
 - Syndromes associated with endocrine dysfunction such as Turner syndrome, Prader-Willi, DiGeorge syndrome, etc.
 - Metabolic bone disease

Objectives:

- Describe normal pituitary function in infants, children and adolescents. Discuss the approaches used to diagnose and manage pituitary dysfunction including isolated growth hormone deficiency, hypopituitarism, and diabetes insipidus.
- Review the patterns of normal growth velocity in infants, children and adolescents, and the factors that can impact growth, both endocrine and non-endocrine.
- Review normal fetal sexual differentiation and the approach to diagnosis and management of ambiguous genitalia.
- Compare the normal progression and timing of puberty, and disorders of pubertal development such as precocious puberty, delayed puberty and gonadal dysfunction. This includes the ability to differentiate between adrenarche and central puberty.
- Discuss the diagnosis and management of adrenal disorders such as congenital adrenal hyperplasia, Cushing's syndrome and Addison's disease.
- Describe the function of thyroid hormone, its effects on growth, and the diagnosis and treatment of hypo and hyperthyroidism.
- Identify the etiologies of type I and type II diabetes, their management, and the acute management of ketoacidosis. Also identify the psychosocial aspects of diabetes and the team approach employed to deal with them.
- List the factors responsible for calcium metabolism and describe the treatment of hyper and hypocalcemia.
- Describe the etiology and presentation of lipid disorders and their management.

Schedule:

Most of the student's time will be spent in diabetes and endocrine clinics, Monday through Friday, 8:00 to 5:00. Participation in inpatient rounds and consults will be at the discretion of the attending. There are no night-time or week-end responsibilities.

Conferences:

Tuesday afternoons, 3:30 to 4:00, case presentations. Third Thursday of each month, "Endorama", which consists of journal club, an invited speaker, and lunch.

Presentations:

Medical students doing a 4-week rotation will give a short presentation (approximately 15 minutes) on a topic of their choice, usually centering on an interesting patient.

Reading:

On file in the endocrine clinic conference room is a notebook filled with recent relevant articles. We recommend two reference textbooks:

Pediatric Endocrinology, Edited by Mark A. Sperling
 Pediatric Endocrinology, Edited by Fima Lifshitz

Both of these are available in the Endocrine Division office.

Evaluation:

By Faculty using standard UW evaluation form.

PEDS 672 P- Office Practice - Spokane (*, max 12)

Offered:	AWSpS; 2 weeks full-time
Prerequisite:	Pediatrics 665P; Third- and fourth-year students.
Total Enrollment:	1 Per 2 week block; per approval of local preceptor
Faculty Contact :	Deborah Harper, MD, djharper@u.washington.edu
Administrative Contact :	Carla Salldin, Carla.salldin@seattlechildrens.org , (206) 987-2063 Janie Ford, jmford@u.washington.edu , 509-747-7211
Clerkship Sites:	Spokane, WA

Goals:

- Obtain an overview of outpatient, urban pediatric practice.
- Develop an increased understanding of common pediatric illnesses and problems.

Objectives:***After completion of this elective the student will be able to:***

- Perform a focused history and physical on an outpatient pediatric patient.
- Outline the diagnostic and therapeutic approach to common pediatric problems
- Relate a family centered approach to well child care and anticipatory guidance
- Describe a pediatrician's daily routine and approach to outpatient care.

Schedule:

Weekdays with preceptor; hours determined by individual preceptor; daily hospital rounds and call every 5 nights.

Conferences:

CME Pediatric Grand rounds 2 times a month & monthly Pediatric Society meetings.

Presentations:

N/A

Readings/texts:

General Pediatric textbook.

Evaluation:

By faculty, on clinical performance using standard UWSOM student evaluation forms. Evaluation form can be acquired from Carla Salldin at carla.salldin@seattlechildrens.org.

PEDS 673 P- Office Practice (*, max 12)

Offered:	AWSpS; 2 weeks full-time.
Prerequisite:	PEDS required clerkship. Third- and fourth-year medical students.
Enrollment:	By Permission only
Location:	Seattle, WA
Facility:	Pediatric Practices in Seattle/suburbs
Faculty:	Community Pediatricians.
Administrative Contact:	Sara Griffin, 206-987-2008, sara.griffin@seattlechildrens.org

Goals

- Obtain an overview of outpatient, urban pediatric practice.
- Develop an increased understanding of common pediatric illnesses and problems.

Objectives

After completion of this elective the student will be able to:

- Perform a focused history and physical on an outpatient pediatric patient,
- Outline the diagnostic and therapeutic approach to common pediatric problems,
- Relate a family centered approach to well child care and anticipatory guidance,
- Describe a pediatrician's daily routine and approach to outpatient care.

Schedule:

As determined by individual preceptor. Depends upon availability

Reading:

General Pediatric textbook.

Evaluation:

By Faculty, on clinical performance using standard UW student evaluation form.

PEDS 674 P- Pediatric Genetics - Spokane (*, max 24)

Offered:	AWSpS, 4 weeks full-time
Prerequisite:	PEDS required clerkship. Third- and fourth-year medical students.
Enrollment:	1 per 4 week block; per approval of local preceptor
Location:	Spokane, WA
Facility:	Inland Northwest Genetics
Faculty:	Judith Martin, MD, martinja@empirehealth.org
Administrative Contact:	Carla Saldin, Carla.saldin@seattlechildrens.org , (206) 987-2063, Janie Ford, jmford@u.washington.edu (509) 747-721

Goals & Objectives:

- Have a systematic approach to the evaluation of a patient with a known or suspected genetic disorder.
- Be able to perform a physical examination with emphasis on identifying and describing congenital anomalies.
- Be familiar with the natural history, etiology, inheritance pattern and management of several of the more common disorders seen in genetics clinic, such as Down syndrome, Turner syndrome, Marfan syndrome, neurofibromatosis type I; and common inborn errors of metabolism, such as phenylketonuria and maple syrup urine disease.
- Be able to construct and analyze a four-generation pedigree.
- Be familiar with genetic counseling for autosomal dominant, autosomal recessive, X-linked, and chromosomal conditions.
- Be familiar with medical resources for the diagnosis and management of genetic disorders.
- Be familiar with resources available in the community for patients and families with genetic disorders, including support groups and intervention programs.
- Be familiar with the newborn screening and follow-up process, including which disorders are screened for in Washington State.

Schedule:

Clinic consults for a population base of over 2 million. Specific schedule set by Dr. Martin on day one of rotation. Additional opportunities for bench research with Dr. Bejjani and consultations at the Shriner's Hospital Clinic (osteogenesis imperfecta).

Conferences:

Twice a month Pediatric CME Grand Rounds.

Presentations:

Students may be expected to study in more depth a topic of his/her choice and present this information in the form of an oral presentation to their preceptor at the end of the rotation. The topic and time of the presentation should be discussed with their preceptor during the first week of the rotation. Handouts with bibliography are encouraged.

Readings/texts:

Students should check with the office contact person the week before each clinic to obtain a list of patients and diagnoses in order to direct their reading.

Evaluation:

Students will be evaluated based on overall performance using the standard UWSOM clinical evaluation form which can be acquired from Carla Salldin at carla.salldin@seattlechildrens.org.

PEDS 679 P-Clinical Problems in Developmental Disabilities (*, max 12)

Offered:	AWSpS; full-time. 2 weeks (for students interested in additional exposure to children with developmental disabilities). 4 weeks (for students pursuing a career in pediatrics).
Prerequisite:	PEDS, MED & OB GYN required clerkships. Fourth-year medical students.
Enrollment:	1 student per rotation.
Facility:	CHDD (UW medical center campus)
Location:	Seattle, WA
Faculty:	Dr. Sam Zinner
Administrative Contacts:	Sara Griffin, 206-987-2008, sara.griffin@seattlechildrens.org

Goals:

- Understand the broad spectrum of childhood developmental and behavioral disabilities,
- Gain skills in the screening, differential diagnosis, assessment and community management of developmental and behavioral disabilities.

Objectives:

After completion of this elective the student will be able to:

- Evaluate a variety of developmental and behavioral problems in an inter-disciplinary clinic setting,
- Outline the approach to community management of developmental and behavioral problems in a local early intervention program,
- Build a framework for "Medical Home" management for children with developmental and behavioral problems and their families.

Schedule:

Daily clinics in a variety of locations: CHDD, Seattle Children's Hospital, Boyer Children Clinic, Seattle Children's Home.

Clinics may include: child development clinic, high risk infant follow-up clinic, neurodevelopmental clinic, autism center, birth defects clinic, plagiocephaly clinic, special pediatric dentistry clinic, genetics, ADHD clinic, and fetal alcohol syndrome clinic. Students also participate in lecture and discussion series.

Reading:

Developmental-Behavioral Pediatrics, Third Ed. Levine, Carey, Crocker (eds).

Multiple readings, CD-ROM tutorials, educational videos and online learning modules on the rotation website at <http://depts.washington.edu/dbpeds>.

Evaluation:

1. By Faculty on student clinical performance using standard UWSOM evaluation form, available through the rotation website to participating faculty at <http://depts.washington.edu/dbpeds>.

PEDS 681 P-Pediatric Genetics (*, max 24)

Offered:	AWSpS; full-time. 2 weeks (for students interested in additional exposure to genetic diseases). 4 weeks (for students pursuing a career in pediatrics or genetics).
Prerequisite:	Pediatrics 665P. Third- and fourth-year medical students.
Enrollment:	1 student per rotation.
Location:	Seattle, WA
Location:	Seattle Children's Hospital, UWMC
Faculty:	Drs. Chance, Glass, Hannibal, Pagon, Parisi, Raff
Administrative Contacts:	Michael Raff, M.D. Cindy Chernoff, 206-987-2056, cindy.chernoff@seattlechildrens.org

Objectives:***After completion of this elective the student will be able to:***

- Demonstrate a systematic approach to the evaluation of a patient with a known or suspected genetic disorder;
- Perform a physical examination with emphasis on identifying and describing congenital anomalies;
- Outline the natural history, etiology, inheritance pattern and management of several of the more common disorders seen in genetics clinic, such as Down syndrome, Turner syndrome, Marfan syndrome, neurofibromatosis type I, and common inborn errors of metabolism, such as phenylketonuria and maple syrup urine disease;
 - Construct and analyze a four-generation pedigree.
- Describe the approach to genetic counseling for autosomal dominant, autosomal recessive;
- X-linked, and chromosomal conditions;
- Use medical resources for the diagnosis and management of genetic disorders;
- Describe the resources available in the community for patients and families with genetic disorders, including support groups and intervention programs;
- Describe the newborn screening and follow-up process, including which disorders are screened for in Washington State.

Schedule:**Clinics - Required:**

Trainees should check with the contact person the week before each clinic to obtain a list of patients and diagnoses in order to direct their reading. Residents will be assigned at least one patient in the Medical Genetics Clinic at Seattle Children's Hospital and will be expected to review the chart, take a history, perform a physical exam, discuss the case with the attending and dictate a clinic note. Medical students will observe but should read about the various diagnoses prior to clinic.

*Meet with a coordinator on the first day of elective to schedule for specific Tuesday clinics.

Genetics Clinic	Seattle Children's Hospital - Whale 7 Clinics, Every Tuesday 9:00 am
Contact persons:	Linda Ramsdell, MS, 987-2663 Darci Sternen, MS, 987-2664
Genetics Clinic	UWMC CHDD – CD246, Every Tuesday 8:00 am
Contact persons:	Robin Bennett, MS and Debbie Olson 616-2135
Genetics Clinic	UWMC – 8SE, Every Thursday 8:00 am
Contact persons:	Robin Bennett, MS and Debbie Olson 616-2135
Biochemical Genetics Clinic	UWMC CHDD – CD246, Every Thursday 12:00 pm
Contact person:	Lisa Sniderman King MSc (except PKU Clinic days) 616-1840
Clinics – Optional:	
Skeletal Dysplasia	Seattle Children's Hospital– Orthopedics 7P, Four Mondays a year, 9:00 am
Contact person:	Michael Raff, MD & Ian Glass, MD
Biochemical Genetics	Seattle Children's Hospital – Whale 7 clinics, 2nd Wednesday, 12:30 pm
Contact person:	Michael Raff, MD
PKU Clinic	UWMC CHDD – CD246 3 rd Wed and following Thur. 9:00 am
Contact person:	Lisa Sniderman King, MSc, 616-1840
Cardiogenetics	SEATTLE CHILDREN'S HOSPITAL – Cardiology 4G 3 rd Wednesday 9:00 am
Contact person:	Ian Glass, MD & Mark Hannibal, MD PhD
Craniofacial Genetics	SEATTLE CHILDREN'S HOSPITAL – Whale 7 2 nd Thursday, 9:00 am
Contact person:	Anne Hing, MD

Conferences:

Conferences - Required:	
Clinic Conference	Every Tuesday, 5:00 pm (immediately following clinic) SEATTLE CHILDREN'S HOSPITAL – P 735 conference room
Case Conference	Second Tuesday of each month, 5:00 – 6:30 pm SEATTLE CHILDREN'S HOSPITAL – Room TBA monthly
Medical Genetics Journal Club	Every Wednesday, 8:30 – 9:30 am UWMC HSB – K250
Case Conference	Every Wednesday, 9:30 am UWMC – K250
Inborn Errors of Metabolism Conference	1 st Wednesday of each month, 4:15 pm CMRMC – Lab Conference Room, 6 th Floor Pavilion
Biochemical Genetics Clinic Conference	Every Thursday, 12:00 pm (prior to clinic) UWMC CHDD CD 246

Medical Genetics Seminar	Every Friday, 12:30 – 1:30 pm UWMC (usually K069)
Conferences - Optional	
Gender Assessment Team	2 nd Wednesday of every other month, 9:00 – 10:15 am SEATTLE CHILDREN'S HOSPITAL – Room TBA Contact person: Linda Ramsdell, MS 987-2663
Pediatric Grand Rounds	Every Thursday, 8:00 am SEATTLE CHILDREN'S HOSPITAL – Wright Auditorium
Perinatal Pathology & Prenatal Diagnosis Conference	Every Friday, 11:00 am UWMC – 2 nd Floor, Ultrasound RR 202 (also teleconferenced to T3252)

Presentations:

Trainees will be expected to study in more depth a topic of his/her choice and present this information in the form of an oral presentation to the Division members at the end of the rotation. The topic and time of the presentation should be discussed with Dr. Raff during the first week of the rotation. Handouts with bibliography are encouraged. Supplies (overhead transparencies, photocopying) are available through the SEATTLE CHILDREN'S HOSPITAL Genetics office.

Reading:

Required: Residents/students should review the video "A Nursing Assessment of Children for Detection of Genetic Disorders and Birth Defects", which is a succinct review of the evaluation of the child with anomalies. The video can be obtained from the genetic counselors at SEATTLE CHILDREN'S HOSPITAL or UW and can be viewed in the library at SEATTLE CHILDREN'S HOSPITAL. Two additional informative videos available at SEATTLE CHILDREN'S HOSPITAL include "Diagnostic Approach to the Dysmorphic Patient" and "Malformation Syndromes". Baker DL, Schuette JL, Uhlmann WR: A Guide to Genetic Counseling. New York: Wiley-Liss.

Trainees should also review the Rotator Notebook, available at SEATTLE CHILDREN'S HOSPITAL, which includes "The Genetic Family History in Primary Care" and other pertinent review articles.

Evaluation:

Students will be evaluated based on overall performance using the standard UWSOM clinical evaluation form

PEDS 683 P- Pediatric Nephrology (8)

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	Pediatrics 665P or its equivalent. Third- and fourth-year medical students.
Enrollment:	2 students per rotation.
Location:	Seattle, WA
Facility:	Seattle Children's Hospital
Faculty:	Drs. Eddy, Watkins, McDonald, Symons, Becker, Hingorani, Smith, Okamura, Yonekawa, Yamaguchi
Administrative Contacts:	Jordan Symons, MD Allory Bauer, 206-987-1310

Goals:

- To understand routine fluid and electrolyte requirements of patients in all pediatric age groups;

- To understand the diagnostic evaluation and management of common pediatric renal diseases, fluid and electrolyte disorders, and hypertension;
- To develop familiarity with pediatric dialysis and pediatric renal transplantation;
- To identify appropriate patients for pediatric nephrology referral.

Objectives:

After completion of this elective the student will be able to:

- Order appropriate fluids and electrolytes for pediatric patients in a variety of clinical settings,
- Assess the volume status of pediatric patients,
- Construct a diagnostic and therapeutic plan for a child with electrolyte abnormalities,
- Prepare and interpret a routine urinalysis and evaluate common abnormalities,
- Discuss the diagnostic evaluation and management of:
 - hematuria.
 - proteinuria.
 - hypertension.
 - urinary tract infections.
- Discuss the differential diagnosis and pathophysiology of:
 - glomerulonephritis.
 - nephrotic syndrome.
 - acute renal failure.
- Summarize:
 - the multi-organ pathophysiology of chronic renal failure.
 - how peritoneal dialysis and hemodialysis are used in patient with renal disease

Schedule:

Inpatient Rounds:

Inpatient rounds Monday - Friday; coordinate meeting time with inpatient fellow and attending

Renal Clinic:

Monday, Tuesday, 1:00 – 5:00 pm; Wednesday, Thursday, 9:00 am -1:00 pm
Meet in Whale 6 clinic

Expectations for Students:

Inpatient Wards:

Students will be assigned patients on the inpatient service. Students will evaluate new patients and present relevant data to attendings for discussion of treatment plans. Students will write a complete H&P for patients they have evaluated. Students will be expected to round on all patients they are following, present the case during rounds and write daily progress notes. Students will also be encouraged to research specific topics related to their patients.

Clinic:

Students will see patients with a resident, attending or fellow. Students may be assigned primary responsibility for outpatient assessment.

Conferences:

First Wednesday of the month 12:00 -1:00 pm: Pathology Conference
Remaining Wednesdays 4:00pm: Nephrology Lecture/Nephrology Seminar
Wednesday 1:00-2:00 pm: Clinic Review/Division Conference
Friday 8:00-10:00 am: Joint Adult/Pediatric Conference at NWKC

Reading:

Pediatric nephrology references are available in the office as well as in the Seattle Children's Hospital library.

Teaching Cases: Students will receive a packet of clinical cases, with questions, describing common renal problems seen in pediatric patients. Students will work to answer the questions and will review the packet of cases with an attending prior to the end of the elective.

Evaluation

1. By student, based on assessment of particular aspects of course curriculum and Faculty, via anonymous questionnaire distributed within Nephrology during the last week of the course.
2. By Faculty and fellows, based on overall assessment of clinical and academic performance using the standard UWSOM form.

PEDS 684 P-Pediatric Pulmonary Medicine (8)

Offered:	AWSpS; 4 weeks full-time.
Enrollment:	1 student per rotation.
Prerequisite:	PEDS, MED, OB GYN, and SURG required clerkships. Fourth-year medical students.
Location:	Seattle, WA
Facility:	Seattle Children's Hospital
Faculty:	Drs. Redding, Carter, Chen, Debley, Gibson, Kifle, Hoffman, Marshall, Moskowitz, Ramsey, Rosenfeld, Wilfond
Administrative Contacts:	Greg Redding, M.D. Holly Kaopuiki, Program Assistant, 206-987-2174

Goals:

- To become familiar with the clinical presentations, diagnoses, and management strategies for common respiratory disorders in children,
- To recognize abnormal physical findings and understand the pathophysiologic significance of these abnormal signs,
- To understand the compartments of the respiratory system and how to identify abnormalities in each compartment that can lead to respiratory failure,
- To understand the role of the pediatric specialty consultant in clinical practice,
- To understand the role of a multi-disciplinary team in management of severe chronic pulmonary disease,
- To understand the range of clinical problems producing abnormal sleep in children, including pulmonary etiologies.

Objectives:

After completion of this elective the student will be able to:

- Recognize abnormal physical examination findings and relate how these reflect pathophysiologic processes;
- Summarize the compartments of the respiratory system and explain how abnormalities in each compartment present clinically and how they can lead to respiratory failure;
- List common clinical respiratory problems referred for outpatient evaluation by pediatric pulmonary specialists and summarize the general approaches to evaluation of these complaints;
- Interpret commonly encountered abnormalities of blood gas analysis, chest imaging, and pulmonary function testing in children;
- Explain the indications, side effects, and pharmacology of commonly used treatments of pediatric respiratory diseases;
- Describe the impact of chronic disease on a child, family, and community;
- Describe the common causes and consequences of abnormal sleep in children, from infancy to adolescence;
- Understand the modalities used by respiratory therapists to improve lung function in children

Schedule:

Monday	12:00 - 1:00 pm	Resident Noon Conference
	1:00 - 4:00 pm	Pulmonary Consultations
Tuesday	8:30 am -12:00 pm	Cystic Fibrosis Clinic.
	1:00 - 5:30 pm	Chest Clinic
Wednesday	8:00 – 12pm	Sleep Clinic in Bellevue or (Pulmonary Team Rounds)
	9:00 – 10:30 am	Pulmonary Team Rounds
	1:00 – 5:00 pm	Pulmonary Consultations
Thursday	8:00 - 9:00 am	Grand Rounds
	9:00 am -12:00 pm	Chest Clinic
	1:00 - 5:00 pm	Pulmonary Consultations
Friday	8:00 - 9:00 pm	Journal Club
	9:00 -1:00 pm	Chest Clinic
	1:00 – 5:00 pm	Pulmonary Consultations

During unscheduled periods, students should be available to evaluate inpatients, including children receiving intensive care, staffed by the on-service fellow and attending. Student should also observe flexible bronchoscopy performed on children.

Once each month: Pulmonary Function Lab Experience, Tracheostomy Rounds, Respiratory Care Rounds.

Conferences:

Other monthly conferences:

2 nd Monday	9:00 am	Radiology Rounds	R-3478
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Evaluation:

1. By Faculty: Students will be evaluated on their interest in learning, fund of knowledge, use of that knowledge, organizational skills, initiative, professionalism, critical thought, and clinical interactions with children and families. Pulmonary fellows and faculty and pulmonary team members will evaluate students.

PEDS 685 P-Pediatric Hematology/Oncology (*,max 24)

Offered:	AWSpS; 2,/4 weeks full-time.
Prerequisite:	PEDS 665, MED 665. Fourth-year medical students.
Enrollment:	1 student per rotation.
Location:	Seattle, WA
Facility:	Seattle Children's Hospital
Faculty:	Drs. Geyer, Pendergrass
Administrative Contacts:	Michele Metcalf, Program Assistant, 206-987-2106

Goals:

- To become familiar with the clinical presentations, diagnoses, and management of malignancy and hematologic disorders in children,
- To recognize abnormal physical findings and understand the significance of these abnormal signs as they relate to cancer in childhood,
- To understand the role of the pediatric specialty consultant in the clinical practice of childhood cancer and hematologic disorders.

Objectives:

After completion of this elective the student will be able to:

- List common clinical problems referred for outpatient evaluation in pediatric hematology oncology and describe the diagnostic and therapeutic approach to these problems,
- Describe the indications, side effects of commonly used cancer treatments
- Perform a comprehensive physical examination on a child with a malignancy or hematological disorder,
- Recognize and describe abnormal physical examination findings and outline the significance of the abnormal signs,
- Describe the impact of cancer on a child, family, and community.

Schedule:

On the first day of the rotation, meet B6553, 6th floor Seattle Children’s Hospital. The rotation can be 2 weeks or 4 weeks duration, usually divided between inpatient and outpatient. Students will independently see a variety of patients in the outpatient clinic. The student will fill the role of an acting intern on the inpatient ward, supervised by the Hematology Oncology fellow and attending.

Reading:

Reading requirement varies according to patient exposure from articles or textbooks available in the clinic and inpatient floor.

Evaluation:

Evaluation is by faculty who have worked with student solely on the clinical performance using the standard UWSOM form

PEDS 686 P- Pediatric Cardiology Elective (*, max 24)

Offered:	AWSpS; 2/4 weeks full-time.
Prerequisite:	PEDS 665. Third- and fourth-year medical students.
Enrollment:	2 students per rotation.
Location:	Seattle, WA
Facility:	Seattle Children’s Hospital
Faculty:	Drs. Boucek, Chun, Gurvitz, Johnston, Jones, Kawabori, Lewin, Olson, Portman, Salerno, Schultz, Sesler, Soriano, Stevenson, Stout, Vernon, Yung
Administrative Contacts:	Troy Johnston, MD Susan Nelson, 206 987 2266

Goals:

- To become skilled in the cardiovascular physical examination of children,
- To recognize the clinical presentation of common pediatric cardiovascular conditions,
- To understand the basic anatomy and physiology of congenital heart disease,
- To understand the diagnostic modalities available for the work-up of congenital heart disease.
- To understand the treatment options for cardiovascular disease in children.

Objectives:

After completion of this elective the student will be able to:

- Perform a focused cardiovascular physical examination in children,
- Describe the clinical presentations of common pediatric cardiovascular conditions,
- Outline the basic anatomy and physiology of commonly encountered types of congenital heart disease,
- Summarize the diagnostic modalities for the work-up of children with congenital heart disease,
- Discuss the treatment options available for commonly encountered types of congenital heart disease.

Schedule:**Clinic:**

Monday through Friday, 8:30 am - 4:00 pm. Students will spend the majority of their time in the Heart Center clinic. Students will participate in the outpatient evaluation of new and returning patients. Emphasis will be on physical diagnosis skills including auscultation. Participation in outreach clinics is possible.

Cardiovascular genetics clinic:

Multidisciplinary clinic to evaluate patients with combined cardiac and genetic problems.

Echocardiography laboratory:

Students will be exposed to echocardiography during clinic. The utility and limitations of echocardiography will be stressed.

Catheterization Laboratory:

Students are encouraged to observe catheterization (1 day) and electrophysiology studies (1 day).

Cardiothoracic Surgery:

Each student will have the opportunity to observe a surgical procedure.

Conferences:**Cardiology Patient Care Conference:**

Mondays at 7:00AM, Heart Center conference room, 3rd floor conference room. Cases are reviewed to discuss possible treatment plans including need for surgical intervention.

Didactic lecture series:

Tuesdays at 7:00AM, G-0070 conference room. Topics pertinent to pediatric cardiology.

Cardiovascular Surgery Conference:

Fridays at 7:30am, 3rd floor conference room. Surgical cases for the week are presented.

Reading/Texts:

The following introductory texts are provided at the beginning of the rotation. Students also have access to recordings of common auscultatory findings.

1. Park, MK, *Pediatric Cardiology for Practitioners*, Moseby, 1996.
2. Park MK, Guntheroth WG, *How to read Pediatric ECGs*, Moseby, 1992.
3. Park MK, *The Pediatric Cardiology Handbook*, Moseby, 1997.

Evaluation:

1. By Faculty: The evaluation will be based on clinical performance and will be elicited from the attendings using the standard UWSOM form.

PEDS 690 P-Advanced Pediatric Clerkship – Boise (*, max 24)

Offered:	AWSpS; 4 weeks full-time
Prerequisite:	PEDS 665, MED 665, OB GYN 665. Fourth-year medical students.
Enrollment:	1 student per rotation.
Location:	Boise, ID
Facility:	St Luke's Regional Medical Center
Faculty:	Ward attending pediatricians on inpatient service.
Contacts:	Perry Brown, M.D. Carla Salldin, 206-987-2063, carla.salldin@seattlechildrens.org

Goals:

- Obtain a more intense exposure to inpatient pediatrics.
- Develop advanced pediatric inpatient management skills.

Objectives:

- Participate at the near intern level on a general pediatric inpatient team.
- Admit, manage and discharge a variety of typical pediatric inpatient conditions.

Schedule:

Attend all daily rounds, lectures and activities including every 4th night call and will participate in outpatient clinics. (More formal schedule will be provided on the first day of the rotation).

Conferences:

Pediatric Lectures
 Attending rounds
 Sign-out rounds

Reading:

General Pediatric textbook
 CLIPP cases (www.clippcases.org)

Evaluation:

By Faculty and residents, on clinical performance using standard UWSOM evaluation forms.

PEDS 691 P-Advanced Pediatric Clerkship – Seattle (*, max 24)

Offered:	AWSpS; 4 weeks full-time.
Prerequisite:	PEDS 665, MED 665, OB GYN 665. Fourth-year medical students.
Enrollment:	Up to 3 students per rotation.
Location:	Seattle, WA
Facility:	Seattle Children's Hospital
Faculty:	Ward attending pediatricians on inpatient service.
Contacts:	F. Curt Bennett, M.D. Sara Griffin, 206-987-2008, sara.griffin@seattlechildrens.org

Goals:

- Obtain a more intense exposure to inpatient pediatrics,
- Develop advanced pediatric inpatient management skills.

Objectives:

- Participate at the near intern level on a general pediatric inpatient team,
- Admit, manage and discharge a variety of typical pediatric inpatient conditions.

Schedule:

Attend all daily rounds, lectures and activities including every 4th night call. (More formal schedule will be provided on the first day of the rotation).

PEDS 692 P-Advanced Pediatric Clerkship – Spokane (*, max 24)

Offered:	AWSpS; 4 weeks full-time
Prerequisite:	Pediatrics 665P; Fourth-year students.
Total Enrollment:	1 Per 4 week block; per approval of local preceptor
Faculty Contact :	Kimberly Grandinetti, MD, grandik@pps-co.org
Administrative Contact :	Carla Salldin, Carla.salldin@seattlechildrens.org , (206) 987-2063 Spokane WWAMI Office, 509-747-7211
Clerkship Sites:	Spokane, WA

Goals:

- Obtain a more intense exposure to inpatient pediatrics.
- Develop advanced pediatric inpatient management skills.

Objectives:

- Participate at the near intern level on a general pediatric inpatient team.
- Admit, manage and discharge a variety of typical pediatric inpatient conditions.

Schedule:

Attend all daily rounds, lectures and activities including every 4th night call. (More formal schedule will be provided on the first day of the rotation). Inpatient load (total) 10-35 patients/day; the student will assume care of 2-4 patients.

Conferences:

Noon conference as available & Grand rounds 2 times a month & Attending rounds daily as scheduled for each team & monthly Peds society meetings.

Presentations:

N/A

Readings/texts:

General Pediatric textbook & CLIPP cases (www.clippcases.org)

Evaluation:

By preceptor and attendings, on clinical performance using standard UWSOM evaluation forms. Evaluation form can be acquired from Carla Salldin at carla.salldin@seattlechildrens.org.

PEDS 697 P- Pediatric Special Electives (*, max 24)

Offered:	AWSpS; 4/6 weeks full-time.
Prerequisite:	Permission of department.+ 2 month application process
Total Enrollment:	Variable.
Faculty Contact:	Curt Bennett, M.D.
Administrative Contact:	Sara Griffin, 206-987-2008, sara.griffin@seattlechildrens.org

By specific arrangement for qualified students, special clerkships or ‘away clerkships’ may be available at institutions other than the University of Washington. Interested students should submit a "Credit for Away Clerkship" form available from the UWSOM Dean's Office Registrar and complete for departmental approval at least two months before advance registration.

Evaluations:

Departmental evaluations are required to be completed by faculty and student prior to receiving a grade.

PEDS 699 P – WWAMI Pediatric Special Electives (*, max 24)

Offered:	AWSpS.
Prerequisite:	Permission of department.+ 2 month application process
Total Enrollment:	Variable.
Faculty Contact:	Curt Bennett, M.D.
Administrative Contact:	Carla Salldin, 206-987-2063, carla.salldin@seattlechildrens.org

By specific arrangement for qualified students, special clerkships or ‘away clerkships’ may be available at institutions other than the University of Washington located within the WWAMI region. Interested students should obtain a “Credit for Away Clerkship in WWAMI” form available from the UWSOM Dean’s Office Registrar and complete for departmental approval at least two months before advance registration.

Evaluations:

Departmental evaluations are required to be completed by faculty and student prior to receiving a grade.

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